RESOURCES

Most states collect fees on new tire sales to fund cleanup, program administration and market development programs for recycling, energy recovery and beneficial use. In addition, each state has laws, regulations or guidance governing collection, storage, transportation, processing and end use or disposal of tire material.

Minnesota PCA
http://www.pca.state.mn.us/industry/ts-links.html#tires

Minnesota Pollution Control Agency

Wisconsin DNR
http://www.dnr.state.wi.us/org/aw/wm/

Illinois EPA
http://www.illinoisbiz.biz/com/recycling/bus_program_used.html
http://www.epa.state.il.us/land/tires/

Todd Marvel
217/524-5024
todd.marvel@epa.state.il.us

Indiana DEM
http://www.in.gov/idem/ctap/wastetire/
http://www.in.gov/idem/soe2003/land/tires.html

Angie Lee
317/308-3045
alee@dem.state.in.us

Michigan DEQ
http://www.michigan.gov/deq/0,1607,7-135-3312_4122---,00.html

Rhonda Oyer Zimmerman
517/373-4750
oyerr@michigan.gov

Ohio EPA
http://www.epa.state.oh.us/dsiwm/pages/tirepro.html

Robert Large
614/728-5347
bob.large@epa.state.oh.us

Pennsylvania DEP
http://www.dep.state.pa.us/dep/deputate/airwaste/wm/MRW/Tires/Tires.htm

Tom Woy
717/787-7381
twoy@state.pa.us

New York State DEC
http://www.dec.state.ny.us/website/dshm/redrecy/wstires.htm

Christian Glander
518/402-8706
cxglande@gw.dec.state.ny.us

Ontario MOE
http://www.ene.gov.on.ca/envision/land/wda/tires/tires.htm

Mary Pysch
416/314-2164

U.S. EPA
http://www.epa.gov/epaoswer/non-hw/muncpl/tires/index.htm
http://www.epa.gov/brownfields/
http://www.epa.gov/glnpo/bns/

Other
Rubber Manufacturers Association
http://rma.org/scrap_tires/

Tire Industry Association
http://www.tireindustry.org/recycling.asp

Recycling Research Institute
http://www.scraptirenews.com/

State of California
http://www.ciwmb.ca.gov/Tires/

A Scrap Tire Cleanup Guidebook and training program was developed which outlines safe, efficient and cost effective clean up methods. For more information, visit the EPA Region 5 website at:

http://www.epa.gov/region5/solidwaste/tires.htm

SCRAP TIRES IN THE GREAT LAKES REGION

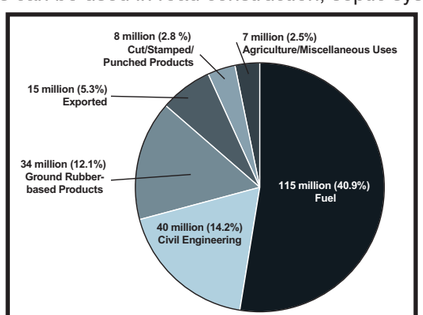
There are at least 300 million scrap tires currently stockpiled across the United States. In the Great Lakes region, Illinois, Wisconsin and Minnesota have successfully cleaned up large piles. However, more than 86 million tires remain at about 500 sites located in Indiana, Michigan, Ohio, Pennsylvania and New York. Tire piles not only pose human health and environmental threats, but also discourage redevelopment of potentially useful property. Recently, a consortium of state, industry and EPA officials established a goal under EPA's Resource Conservation Challenge to clean up 55% of tires in stockpiles by 2008.

Tire piles are a problem.

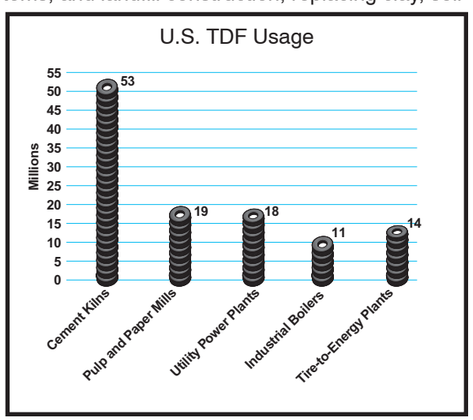
- **Pests.** A single tire can support the breeding of thousands of mosquitoes every year. They can carry and transmit diseases, including encephalitis, dengue fever, and the West Nile virus.
- **Fire.** Stockpiles can ignite due to arson, lightning strikes or equipment accidents. They are difficult to extinguish and can burn for months. They usually become major hazardous incidents affecting entire communities, requiring evacuations and major fire and pollution control operations. Governments spend millions of dollars fighting and cleaning up after tire fires every year.
- **Pollution.** During a fire, tires break down into hazardous compounds including gases, particulate, ash and oil. Oily runoff can pollute nearby rivers and streams causing fish kills, or seep into groundwater and contaminate wells. The acrid smoke contains polycyclic aromatic hydrocarbons, benzene, styrene, phenols, dioxins and butadiene. Benzo(a)pyrene, a persistent bio-accumulative toxic substance, has been designated as a priority pollutant in the Bi-national Toxics Strategy, which aims to protect the Great Lakes.
- **Development.** Many large piles are located on 'Brownfield' properties that could otherwise be redeveloped.

Stockpiled tires are mixed with water, dirt and other debris, limiting available markets.

- **Tire Derived Fuel (TDF).** When burned for energy recovery, tires produce more energy and burn cleaner than most coals. TDF can either be chips or whole tires, depending on the combustion device, and are typically a supplement to other fuels.
- **Civil Engineering.** Tire shreds can be used in road construction, septic systems, and landfill construction, replacing clay, soil and aggregates.
- **Ground Rubber.** Tires free of dirt and debris can be processed to produce:
  - Ground cover on playgrounds, horse arenas and athletic fields
  - Mats, tiles, bricks, guard rail blocks and dock bumpers
  - Agricultural and horticultural applications

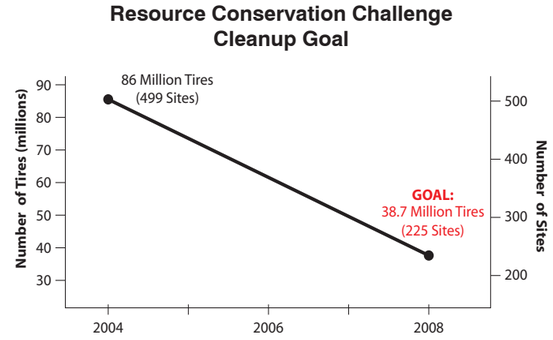


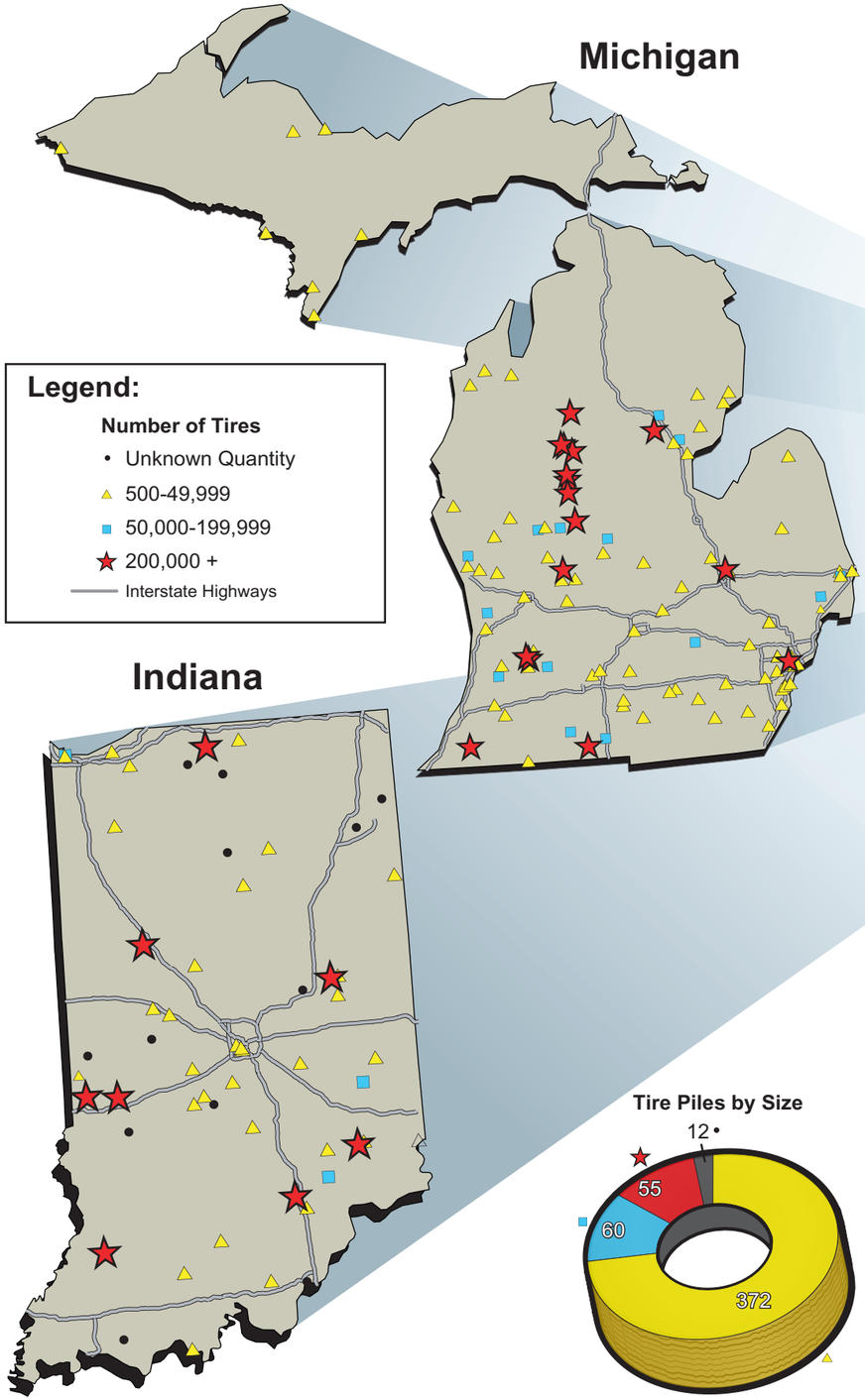
78% of the 281 million scrap tires generated annually have established markets.

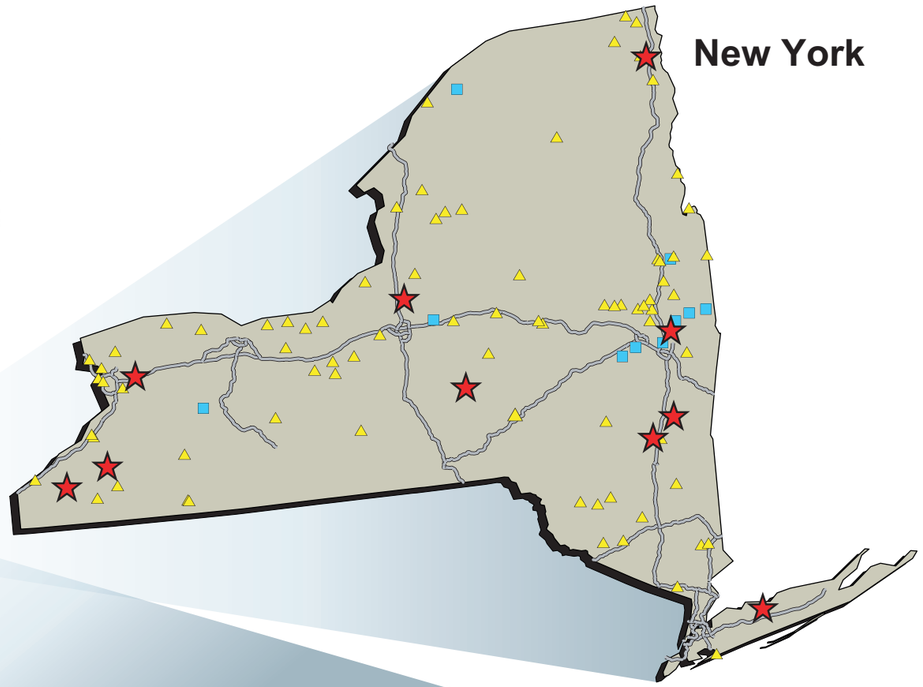


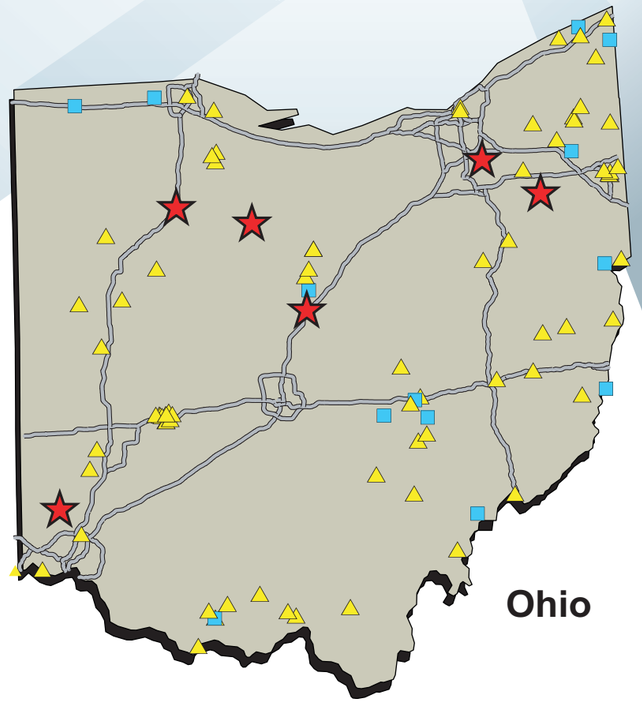
May 2004

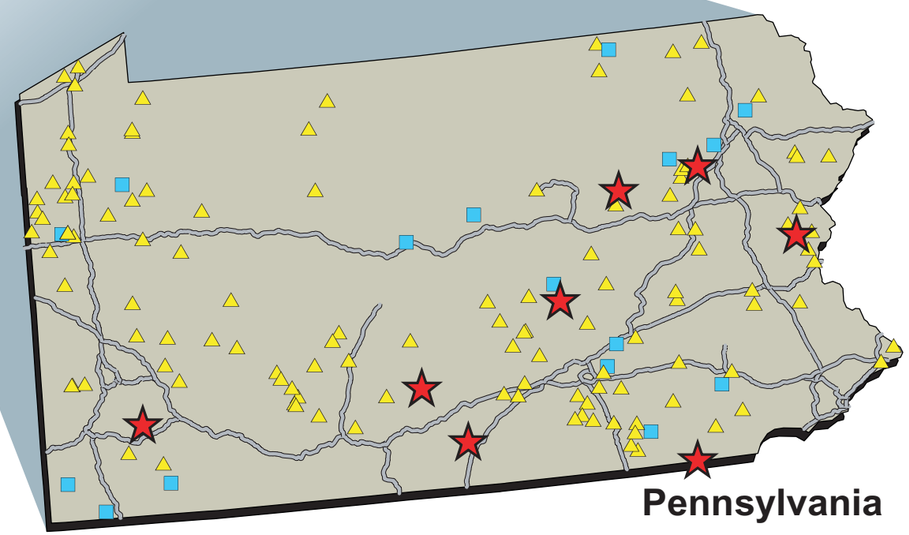
TIRE PILES IN THE GREAT LAKES REGION











In 2004, several states with significant remaining piles conducted complete inventories and GIS mapping of large tire piles (defined as having > 500 tires) in coordination with U.S. EPA Region 5 and Tetra Tech EM Inc. Updated databases with complete site-by-site information and detailed electronic maps may be available from state agencies (see reverse side for contacts).